

**SITE INSPECTION PHASE III PRIORITIZATION
TASK WORK PLAN**

**DELTA SHIPYARDS
HOUMA, TERREBONNE PARISH, LOUISIANA
EPA CERCLA ID NO. LAD058475419**

Prepared for:

**U.S. Environmental Protection Agency
Region VI
1445 Ross Avenue
Dallas, Texas 75202**

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SECTION 1 INTRODUCTION

Under the authority of the Comprehensive Environmental Response Compensation and Liability Act of 1980 (CERCLA) and the 1986 Superfund Amendments and Reauthorization Act (SARA), Roy F. Weston, Inc. (WESTON[®]) has been tasked to perform a Site Inspection Prioritization (SIP) of the Delta Shipyards (DS) site (EPA Identification No. LAD058475419) located in Houma, Terrebonne Parish, Louisiana (Figure 1). Based on available site information, WESTON believes that the site is presently eligible for action under CERCLA/SARA. The United States Environmental Protection Agency (EPA) Region VI retained WESTON to complete this investigation under EPA Contract No. 68-W9-0015 and Work Assignment No. 27-6JZZ.

This document represents the Task Work Plan (TWP) for the SIP. The purpose of the TWP is to propose sample locations and field procedures for the SIP to close data gaps based on available background information and the results of the site reconnaissance.

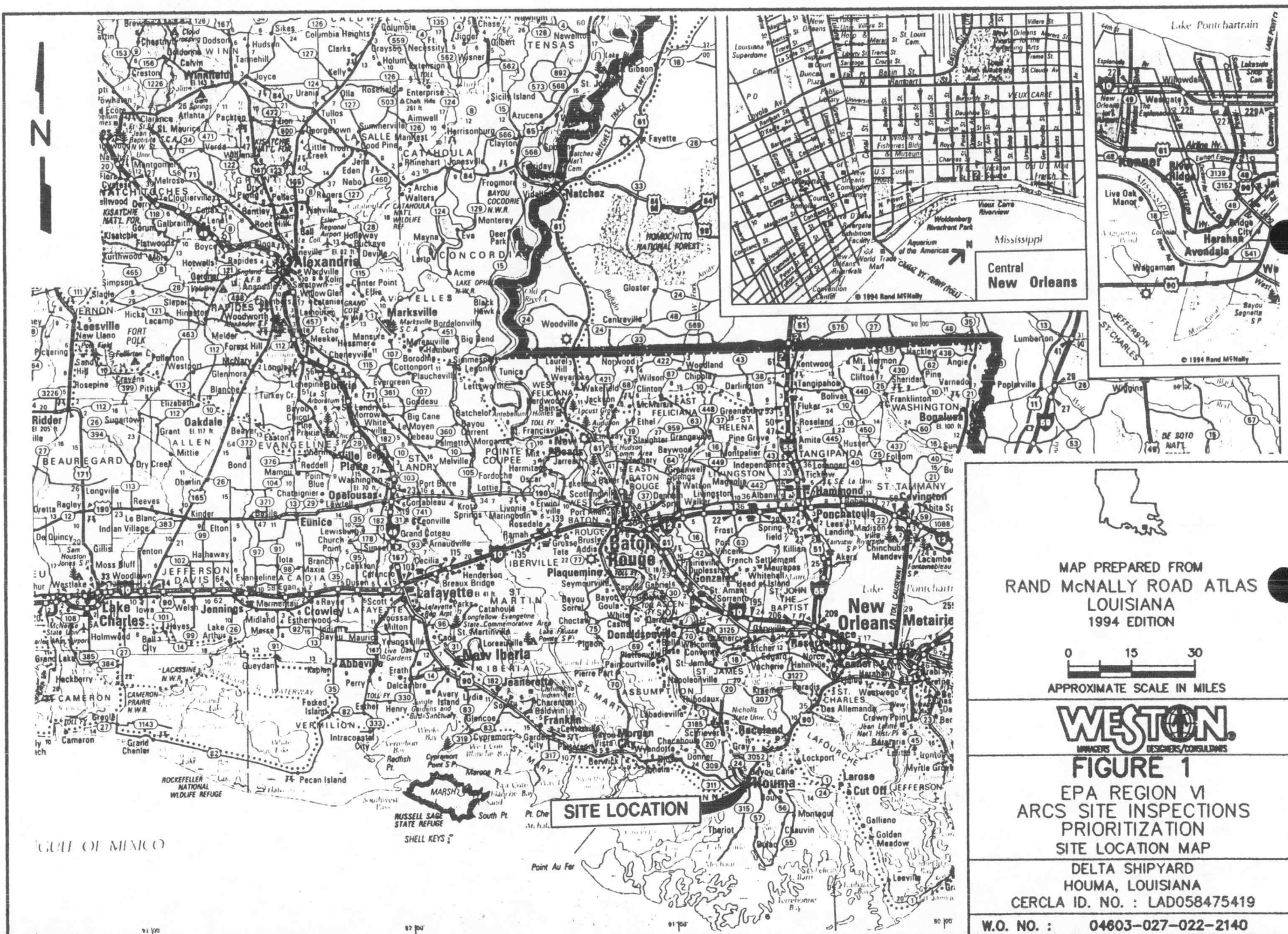
1.1 PURPOSE OF THE INVESTIGATION

EPA established the SIP process to help assess known or potential hazardous waste sites, address first those sites that pose the greatest threat to human health and the environment, and standardize the criteria by which sites are evaluated within the Superfund program. Through the SIP, EPA reviews sites that generally have had a complete Site Inspection (SI) performed on them but that have not received a final decision regarding the need for further investigation or remediation. The outcome of the SIP indicates whether the available information for the site meets a minimum standard of evaluation reflecting the requirements of the revised Hazard Ranking System (HRS). The SIP process better enables EPA to determine if a site is likely to receive a score of 28.50 or above under the HRS, potentially making it a candidate for placement on the National Priorities List (NPL). If it is determined that the site will not score above the NPL threshold of 28.50, EPA is in a position to declare that the site evaluation under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) has been accomplished.

1.2 SCOPE OF WORK

The scope of work for the SIP will focus on obtaining the most important background information and analytical data required to evaluate the site using the HRS. WESTON will complete the following major tasks as part of this SIP:

- Obtain and review available background information concerning the site;
- Research data related to the groundwater, surface water, soil exposure, and air pathways;



- Conduct a site reconnaissance to document current site conditions, locate hazardous waste sources, identify potential receptors or targets of a release, and select sample locations;
- Prepare a site-specific Task Work Plan (TWP) and a Health and Safety Plan (HASP) describing planned sampling activities and appropriate safety protocol;
- Conduct environmental sampling at and near the site; and
- Prepare a Site Inspection Prioritization Final Report to document the results of site reconnaissance, sampling activities and sample analyses as well as to present the background information obtained for the site.

1.3 WORK PLAN ORGANIZATION

The SIP TWP has been organized in a format that is intended to facilitate application of information in the report to the HRS. The workplan is organized as follows:

- Section 1 - Introduction,
- Section 2 - Site Background Information,
- Section 3 - Exposure and Migration Pathway Characteristics,
- Section 4 - Sampling Visit Activities,
- Section 5 - Project Information, and
- Section 6 - Reference List.

A copy of the site access agreement is provided in Appendix A, the site-specific Health and Safety Plan (HASP) is provided in Appendix B, sampling procedures are provided in Appendix C, EPA Contract Laboratory Program (CLP) Guidelines are provided in Appendix D, and a Site Reconnaissance Checklist is provided in Appendix E.

SECTION 2

SITE BACKGROUND INFORMATION

A summary of the location, description, operational history, hazardous waste characteristics, and concerns of the site is presented in the following sections. The site background information presented in this TWP has been obtained from reports previously completed for the site, as well as WESTON's recent site reconnaissance.

2.1 SITE LOCATION AND DESCRIPTION

The Delta Shipyards site is located in Houma, Terrebonne Parish, Louisiana. The geographic coordinates of the site are approximately latitude 29°34'2" north and longitude 90°42'18" west. A Site Area Map is provided as Figure 2.

The site can be reached by traveling south on Highway 90 into Houma until reaching East Main Street. Travel east on Main Street for approximately 1.8 miles and turn south on Howard Avenue. From Howard Avenue travel south for approximately 2.2 miles until reaching Industrial Boulevard, turn east and travel 0.5 miles. The site is on the south side of Industrial Boulevard.

WESTON contacted Mr. Lynn Dean, owner of Elevated Boats Incorporated (EBI), the present owner of the site (8404 Colonel Drive, Shelmett, Louisiana 70043), in May 1994. Mr. Kenneth Serigne, Department Manager for the EBI property, signed an EPA Access Agreement on 15 June 1994 allowing WESTON access to the DS site (Appendix A). Mr. Dean was reached at (504) 278-4200. Mr. Serigne can be reached at (504) 868-9655. WESTON met with Mr. Serigne during the site reconnaissance (Reference 1).

WESTON completed the SIP site reconnaissance on 12 July 1994. The site is located in a large industrial park which covers approximately 165 acres in southeastern Houma, Louisiana. The industrial park forms a peninsula and is surrounded by Bayou La Carpe on two sides. Bayou La Carpe provides access to the Gulf of Mexico via the Intercoastal Waterway. EBI purchased 110 acres of the park in 1985 and currently leases part of it to other industries. The site is surrounded by the following tenants: Gemoco to the north, Christie Industries to the southeast, Offshore Diving and Salvaging and a blasting company to the west (Reference 1). EBI maintains a fabrication plant/office building onsite. The Delta Shipyards site contains some old gas stripping equipment (i.e. storage tanks, separator, boiler) left behind from the DS operation. Two waste oil surface impoundments were closed and backfilled in 1984 and are now a parking lot used by EBI employees (Reference 1, 2). Four larger pits are located south of the warehouse/office area and are surrounded by a dense growth of vegetation (Reference 1). A Site Plan is provided as Figure 3.

2.2 SITE HISTORY

The site is an active boat fabrication plant located in Houma, Terrebonne Parish, Louisiana. The present owner is EBI, who purchased the property in 1986. Delta Shipyards owned the site prior to EBI, however, it is unknown in what year operations began at the site. DS consisted of a cleaning and repairing facility for small cargo vessels, fishing vessels, and oil barges. Before repair work could be commenced, the vessels had to be certified vapor free by the Coast Guard. The vessels were steam cleaned and the oily wastes were removed. The generated oils and waste water were sent through a separation process after which the waste oil was recovered and sold. Wastes were stored in surface impoundments onsite (Reference 3). Two waste oil pits located approximately 100 feet east of the fabrication building were closed out in 1984 under the supervision of the Louisiana Department of Environment Quality (LEDQ) Hazardous Waste Division. Two monitoring wells are reportedly located around the pits, however, during the site reconnaissance, only one could be located. Four larger pits are located approximately 800 feet south southeast of the fabrication building. One pit is located west of the Plant Shell road. According to the Wink Engineering sampling mission this pit is actually three pits side by side, but for the purposes of this work plan it will be considered one single pit (Reference 4). The remaining three pits are located east of Plant Shell road. The pit on the west has been reportedly covered over with a fill material, while the three pits on the east are exposed. The pits were reportedly used to dispose of waste oil and oil field drilling material (Reference 4).

2.3 SUMMARY OF PREVIOUS INVESTIGATIONS

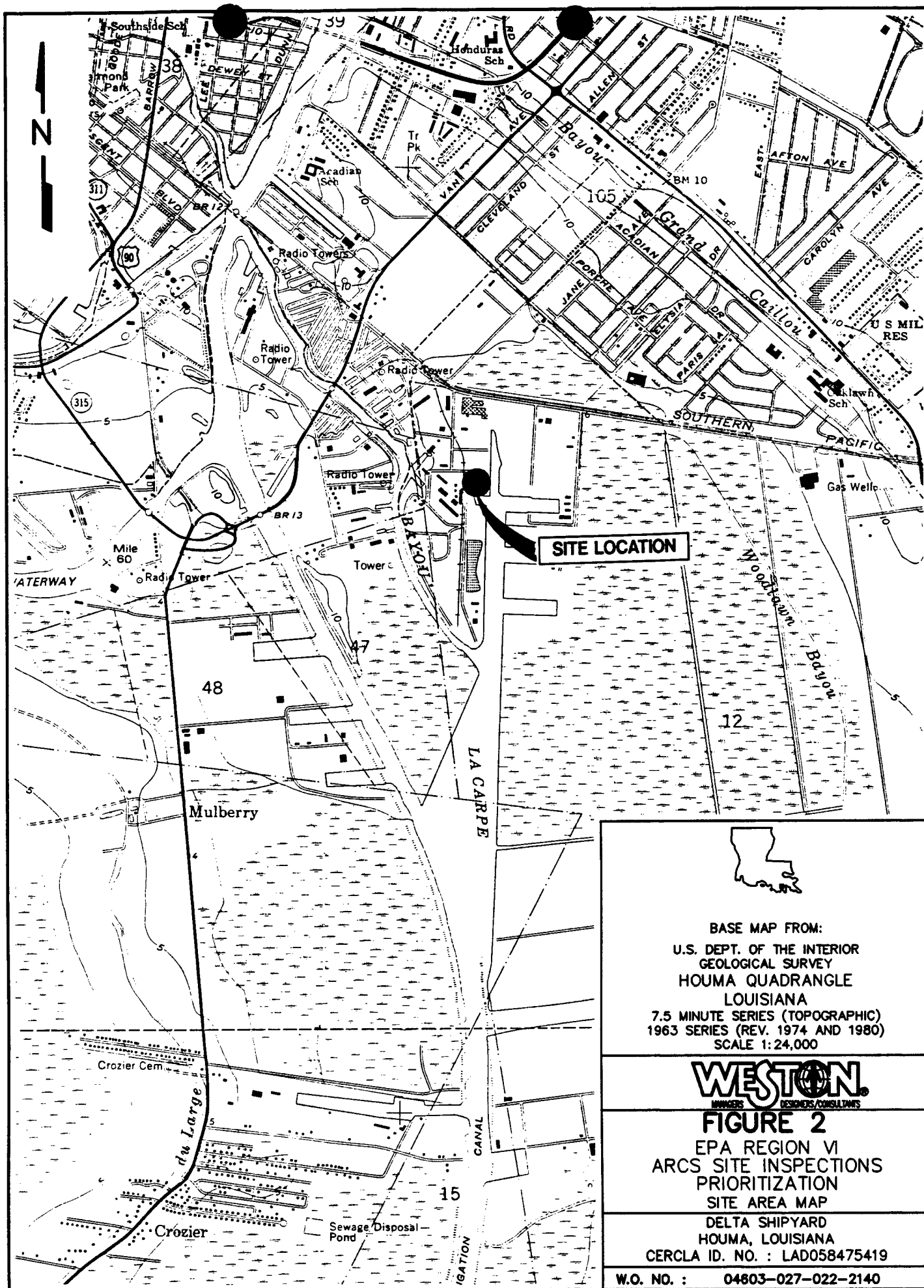
Previous investigations of the site have documented the closure of two surface impoundments and the existence of four others.

Previous investigations at the Delta Shipyards site include the following:

- Site Inspection (SI) by Ecology & Environment, Inc. on 11 March 1981,
- Site Inspection (SI) by The Earth Technology Corporation on 12 September 1984,
- Sampling report by Wink Engineering in July 1985.

2.4 SOURCE WASTE CHARACTERISTICS AND SITE CONCERNS

Information concerning the known or potential hazardous waste source areas (HWSAs) at the site and the constituents thought to be associated with each source are described in the following sections along with a summary of potential concerns associated with contaminant migration and exposure.

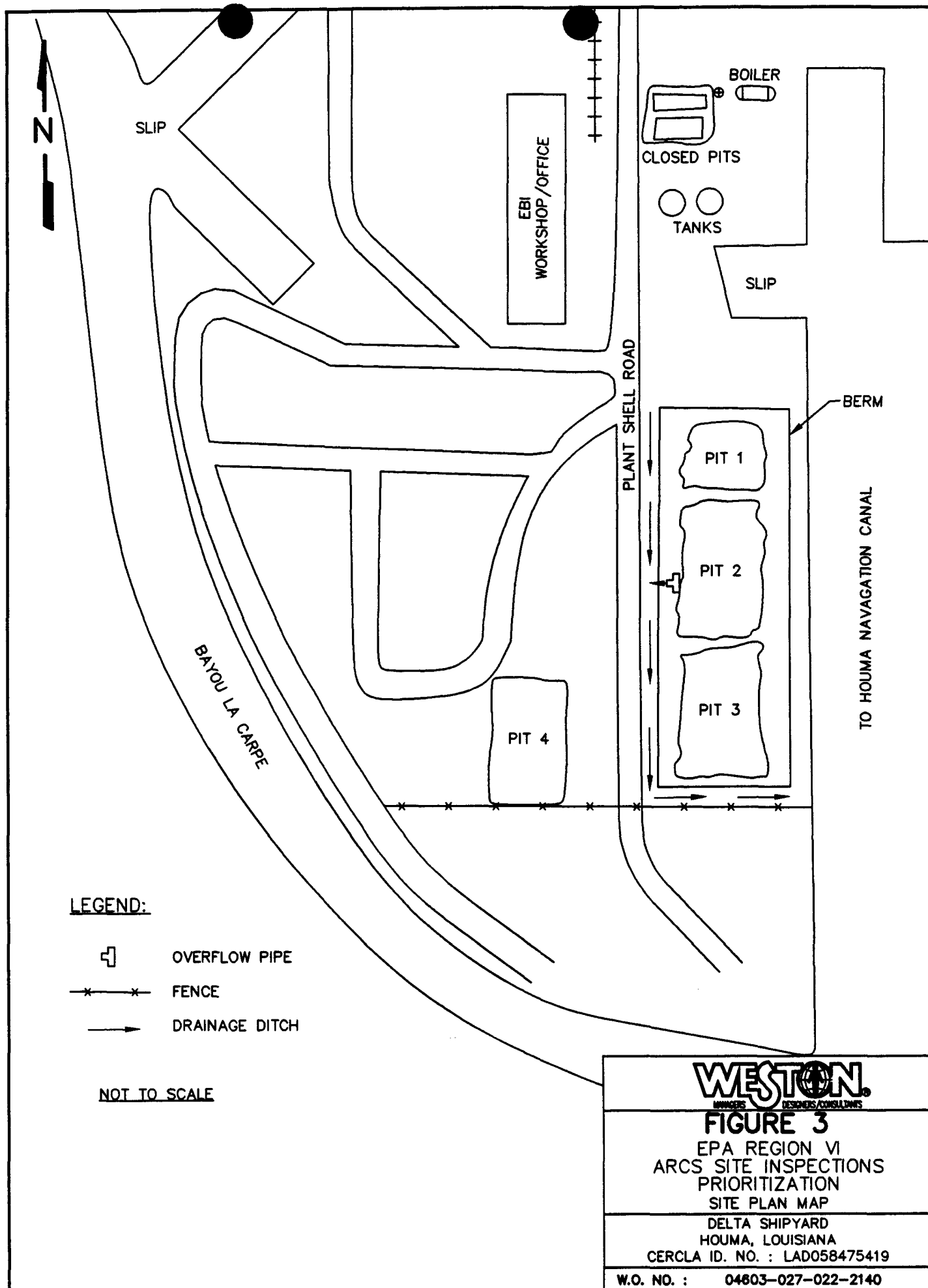


BASE MAP FROM:
 U.S. DEPT. OF THE INTERIOR
 GEOLOGICAL SURVEY
 HOUMA QUADRANGLE
 LOUISIANA
 7.5 MINUTE SERIES (TOPOGRAPHIC)
 1963 SERIES (REV. 1974 AND 1980)
 SCALE 1:24,000



FIGURE 2
 EPA REGION VI
 ARCS SITE INSPECTIONS
 PRIORITIZATION
 SITE AREA MAP
 DELTA SHIPYARD
 HOUMA, LOUISIANA
 CERCLA ID. NO. : LAD058475419

W.O. NO. : 04603-027-022-2140



2.4.1 Source Waste Characteristics

Based on available background information and the results of WESTON's site reconnaissance efforts, four HWSAs have been identified at the site. Four unlined waste oil pits are located on sit and have been documented to be used for the disposal of waste oil and oil field drilling material. All four pits reportedly still contain contaminants. Pits 1, 2, and 3 were visually inspected during the site reconnaissance and contained black oily substances. Rain water pooled on the surface of Pit 2 had an oily sheen. Pit 4 is reportedly covered over with a fill material and was not inspected during the site reconnaissance. The four pits together cover an area of approximately 294,900 square feet (Reference 4). The location of the pits are shown in Figure 3.

2.4.2 Site Concerns

Possible concerns associated with the HWSAs at the site and the migration of or exposure to hazardous substances attributable to the site through the groundwater, surface water, soil exposure, and air pathways include the following:

- A release to groundwater is possible because the HWSAs are unlined, however due to the impermeable nature of the surface and subsurface soils at the site and the lack of groundwater usage in the area, this is of limited concern.
- A release to surface water is suspected because the site reconnaissance documented rain water from the pits flowing into a drainage ditch that empties into Bayou La Carpe.
- A release to soil is possible based on the site reconnaissance and previous activities at the site.
- A release to air is not suspected.

SECTION 3

EXPOSURE AND MIGRATION PATHWAY CHARACTERISTICS

Information regarding the groundwater, surface water, soil exposure and air pathways are presented in the following sections. Sampling and non-sampling data collected to-date are addressed. Known data gaps are identified at the end of the section.

3.1 GROUNDWATER PATHWAY

The site is located on approximately 40 to 50 feet of Quaternary terrace and alluvial deposits composed of mainly silty clays (Reference 3). Two soil borings were drilled to 50 feet around the two closed pits and revealed clays to 50 feet. There are no known drinking water wells within a one mile radius of the site.

3.2 SURFACE WATER PATHWAY

Surface water draining from the Delta Shipyards pits flows into Bayou La Carpe and then into the Houma Navigational Canal. The probable point of entry (PPE) occurs where the drainage ditch empties into Bayou La Carpe approximately 30 feet southeast of Pit 3. The Houma Navigational Canal is considered useful for secondary contact recreation and propagation of fish and wildlife.

3.3 SOIL EXPOSURE

There is no fence to control access to the pits; however, Pits 1, 2, and 3 are surrounded by dense vegetation limiting access. The site is an industrial park and has little or no recreational value. Using the Geographic Environmental Modeling System (GEMS), WESTON estimated that approximately 3578 people live within a 1-mile radius of the site (Reference 5). The majority of these people fall within 1/2 to 1 mile of the site which incorporates residential areas of southern Houma.

3.4 AIR PATHWAY

The air pathway was not evaluated since the pits are no longer active. However, during the site reconnaissance, WESTON performed ambient air monitoring at the site with an Organic Vapor Analyzer and recorded instrument readings 1 to 3 times greater than background in the breathing zone and over 1000 times greater than background near the surface of the pits (Reference 1).

3.5 DATA GAPS

Several data gaps have been identified based on review of the background information available from previous investigations. WESTON will close as many of these data gaps as possible as part of the SIP sampling visit. The major data gaps are as follows:

- Current analytical data to determine possible hazardous constituents of the pits.

- Sampling of the drainage pathway to determine if possible hazardous constituents are migrating offsite.

SECTION 4

SAMPLING VISIT ACTIVITIES

The activities planned for the SIP sampling visit are outlined in this section of the TWP. The sampling strategy presented is based on the operational history, known source waste characteristics, the probable pathways of contaminant migration and the likely targets related to the site.

WESTON will complete sediment sampling activities as part of the site SIP. Samples will be collected using sampling techniques and quality control procedures that generally meet EPA Region VI, EPA CLP, and WESTON guidelines. The specific tasks that will be performed during the sampling visit are described in Sections 4.2, 4.3, and 4.4. It is expected that the tasks will be completed in the order outlined in these sections. However, some tasks may overlap with others. General information for each task is provided as instructions to guide the field team.

It is important to note that the intent of the sampling mission is to sample what appears to be the most contaminated materials in the areas targeted for sampling. Based on the results of site reconnaissance, WESTON has selected locations for sampling that appear to be those most likely to provide positive evidence of the presence of hazardous substances onsite.

4.1 FIELD PERSONNEL

WESTON plans for a field team consisting of four personnel to complete the tasks described in the following sections. The anticipated personnel, along with their respective project roles and responsibilities, are identified in Table 4-1.

4.2 MOBILIZATION TASKS

The tasks which the WESTON field team generally will complete prior to sampling are described in this section.

4.2.1 Task 1 - Mobilization

The WESTON field team will mobilize from the WESTON Regional Equipment Stores (RES) warehouse in Houston, Texas. One or two team members will load equipment for the SIP sampling visit in a van, quality checking the equipment in the process. An equipment checklist will be used to verify that the necessary sampling equipment is included in the mobilization. As part of the mobilization effort, the field team will assemble the required sample containers and CLP documentation prior to leaving for the site, as time permits. The sample jars, sample tags, sample numbers and custody seals needed for each sample station will be placed in a 2-gallon, plastic ziplock bag, which will be sealed and packed in a cooler. The sample station number will be labelled in ink on each 2-gallon bag and on the top of each sample container lid. This process will facilitate sampling efforts once the field work begins. When the required sampling equipment has been loaded, one or two field team members will drive the equipment

van to the site. Depending on the distance from WESTON's office to the site this may be done the day before sampling activities are scheduled or early on the same day. The remaining field team members may drive or fly to the site. The field team generally will meet at their place of lodging, if any, before proceeding to the site. WESTON will inform the EPA Work Assignment Manager (WAM) of the sampling mission and its final schedule two weeks before the start date of the field work.

Once at the site, the Field Team Leader (FTL) will meet with the site and EPA representative, if present. The access agreement should be shown to the site representative to reconfirm site access. A copy of the Consent for Access form signed by the site representative is included as Appendix A.

As part of initial mobilization reconnaissance activities and before going onsite, the WESTON team will drive the route from the site to the nearest hospital.

4.2.2 Task 2 - Health and Safety Meeting and Protocol

After arriving at the site and checking in with the site representative, if present, the WESTON field team leader and the Site Health and Safety Coordinator (SHSC) will conduct a meeting to review the technical aspects of the project and discuss the site-specific HASP and related WESTON Standard Operating Procedures (SOPs) with the sampling team. The HASP and related SOPs are provided in this TWP as Appendix B. After this meeting, a copy of the HASP, with the map to the hospital on the first page, will be placed on the dash of the field vehicle designated for emergency use.

The field work for the SIP will be conducted in general accordance with the site-specific HASP. The sampling team generally will work with Level-D personal protective clothing and equipment as specified in the HASP, as long as air monitoring results justify this level of protection. The monitoring instruments to be used are specified in the HASP. Depending on the air monitoring results, the sampling team may be required to upgrade to a Level-C personal protection status if one or more of the air monitoring action levels listed in the HASP is met or exceeded.

At the start of each day and as necessary at other times during the sampling visit, the team leader will conduct safety meetings to reiterate site concerns and address any new technical or safety issues.

A designated team member will perform a field calibration check and overall inspection of the monitoring instruments each day prior to sampling.

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TABLE 4-1

ANTICIPATED PROJECT PERSONNEL

NAME	TITLE	ROLES	PROJECT RESPONSIBILITIES
Peter Rung	Assistant Geologist I	Project Task Leader	<ul style="list-style-type: none">● Project Coordination from the WESTON office.
Diane Williams	Assistant Geologist I	Field Team Leader	<ul style="list-style-type: none">● Implementation of the Task Work Plan and Health and Safety Plan in the field, and final sample location selection.● Sampling and safety oversight and quality control.● Logbook documentation and photography.● Public relations and client interactions.● Sample management.
Dennis Hayes, P.G.	Associate Geologist	Project Team Leader, and Site Safety Officer	<ul style="list-style-type: none">● Collection of samples.● Equipment management.● Sample documentation, packaging, and shipping.● Mobilization/Demobilization.
Bryan Weise	Technician	Assistant Sampler	<ul style="list-style-type: none">● Air monitoring/monitoring equipment calibration.● Collection of samples.● Equipment management and decontamination.● Mobilization/Demobilization.
Eric Tate	Assistant Engineer I	Sample Manager	<ul style="list-style-type: none">● Sample documentation, packaging, and shipping.● EPA SMO/RSCC coordination.

4.2.3 Task 3 - Initial Sample Location Reconnaissance

After the safety meeting is conducted, the WESTON FTL will meet with the site representative and any EPA representative present to complete an initial survey of the sample locations indicated in the TWP. This will be done to allow the FTL to become familiar with the area of investigation, verify that sample locations are accessible, and identify potential health and safety concerns at each location. This initial reconnaissance will be conducted from the support zone as much as possible. If entry into a potential exclusion zone area is required for this task, a second WESTON team member will accompany the team leader to perform air monitoring during the reconnaissance.

If a sample location is found to be inaccessible for some reason, alternative sample locations may be chosen in consultation with the WESTON Project Team Leader (PTL). The PTL will communicate alterations in the TWP to the WESTON Site Manager and EPA WAM.

4.2.4 Task 4 - Acquisition of Offsite Access

Prior to performing sampling activities, the owners of any offsite properties for which sampling has been proposed will be contacted. Unless an EPA representative designated by the WAM to obtain offsite access is present in the field, the WESTON FTL will obtain permission from the owners for WESTON to collect samples from their property. The owners of offsite properties targeted for sampling will be provided with a fact sheet explaining the investigation, if one is available.

If access cannot be obtained at an offsite property targeted for sampling, the WESTON FTL will select an alternate sampling location after consultation with the WESTON PTL who in turn will notify the EPA WAM of any alterations to the TWP.

4.2.5 Task 5 - Command Post Establishment

After the safety meeting has been held, the WESTON team will establish a command post in an accessible location at the site in an area generally thought to be unimpacted by site operations, if such an area is available. The command post will be located in the support zone in which work may proceed in Level D without continuous air monitoring. Access to the exclusion zone and contaminant reduction zone established around the on-site waste source areas will be controlled through the command post.

The command post will include the following:

- An equipment staging area where equipment can be prepared for usage,
- A decontamination area (as specified in the HASP, Appendix B) where field personnel and equipment can be decontaminated, and
- A sample management area where samples can be labelled, preserved and packaged.

Sampling activities to be performed in offsite areas, if any, will mobilize from the onsite command post.

4.3 SAMPLING TASKS

Field tasks 6 through 12 are associated with the collection of samples and they are described in the following sections. Sample locations are shown in Figure 4 and are summarized on Table 4 at the end of this section.

4.3.1 Task 6 - Documentation of Field Activities

The WESTON FTL will document in a logbook the activities performed during the SIP sampling visit as well as other significant observations made throughout the duration of the field investigation. The FTL will keep a chronological log of field activities in the logbook. Additionally, the FTL will take photographs to support the observations documented in the logbook.

The documentation recorded in the logbook for each sample location will include:

- Sample station number,
- Sample location (including the address, and the distance and bearing from a fixed reference point),
- Sample description (matrix, color, odor, OVA responses, etc.),
- CLP sample numbers and tag numbers,
- Date and time of sample collection, and
- Conditions around the sample location.

4.3.2 Task 7 - Equipment Decontamination

Prior to sampling, the WESTON field team will decontaminate the sampling equipment which will come in contact with the samples during sample collection procedures. Equipment decontamination will be performed at the command post. To complete the decontamination process, the equipment will be:

- Washed in a tub or bucket with a mixture of potable water and Liquinox (or other non-phosphate detergent),
- Rinsed in a bucket with potable water,
- Rinsed with deionized water, and

- Allowed to air dry.

When available, WESTON will utilize dedicated sampling equipment for each sample station to minimize the need for decontamination. WESTON will decontaminate the sampling equipment at the command post before and after use. The amount of rinsate water generated will be kept to a minimum, and the rinsate water generated during the decontamination processes will be collected in a small drum or 5-gallon buckets.

At the end of the field activities, the water will be disposed of at the end of the sampling mission in accordance with Task 15, discussed later in this TWP.

4.3.3 Task 8 - Waste Sampling

WESTON will not collect samples of waste materials such as sludges or drum contents as part of this SIP.

4.3.4 Task 9 - Soil Sampling

WESTON will collect three soil samples as part of this SIP to document the HWSAs and background conditions of onsite soils. The soil samples will be collected as follows:

- One soil sample (SS-1) will be collected from the area north of Pit 1. This sample will serve to document background conditions of the onsite soils.
- One soil sample (SS-2) will be collected from the Pit 4 at the surface. This sample will be for waste source characterization.
- One soil sample (SS-3) will be collected from the Pit 2 below the cover soil. This sample will be for waste source characterization.

4.3.5 Task 10 - Surface Water and Bottom Sediment Sampling

WESTON will collect seven sediment samples as part of the SIP to document the HWSAs and a release to the drainage pathway and surface water. The sediment samples will be collected as follows:

- One sediment sample (SED-1) will be collected from the Pit 1. This sample will be for waste source characterization.
- One sediment sample (SED-2) will be collected from the Pit 2. This sample will be for waste source characterization.
- One sediment sample (SED-3) will be collected from the Pit 3. This sample will be for waste source characterization.

- One sediment sample (SED-4) will be collected from the drainage pathway upstream of Pit 1. This sample will serve to document background conditions of the sediments/soils in the area.
- Two sediment samples (SED-5, SED-6) will be collected from the drainage pathway 10 feet downstream of the overflow pipe on Pit 2. These samples will serve to document a release to the drainage pathway. Sample SED-6 is a blind field duplicate of SED-5.
- One sediment sample (SED-7) will be collected from the drainage pathway at the confluence with Bayou La Carpe/Houma Navigation Canal at the PPE. This sample will serve to document a release to the drainage pathway.

Sediment sampling procedures are included in Appendix C.

4.3.6 Task 11 - Groundwater Sampling

WESTON will not collect groundwater samples as part of this SIP.

4.3.7 Task 12 - Sample Management

WESTON will manage the samples collected during the SIP in a manner generally consistent with EPA and EPA CLP guidelines. Specific guidelines are provided in the following subsections. Additional guidelines are provided in Appendix D.

4.3.7.1 Sample Container Decontamination

When a sample is collected and returned to the command post, the sample manager will see that the outside of each container is decontaminated. To decontaminate the sample containers, each sample container will be washed with deionized water and dried with a towel.

4.3.7.2 Sample Documentation

Each sample will be appropriately documented and identified using the appropriate EPA CLP labels, tags, and forms. The following guidelines will be used:

- Each sample station will receive a set of CLP sample numbers. Samples for organic analysis will receive sample numbers beginning with "F", the inorganic samples will receive sample numbers beginning with "M", and samples for special analyses will receive sample numbers beginning with "S".
- Each bottle or jar for a sample station will receive a sample number sticker, a sample tag, and a custody seal.
- The sample information will be written on the appropriate Traffic Reports/Chain-of-Custody forms which will remain with the samples.

Additional information regarding sample documentation procedures is included in Appendix D.

4.3.7.3 Sample Packaging

Once labelling is completed, the sample manager and FTL will review the sample documentation for accuracy before the samples are packaged for shipping. Once this quality assurance check is completed, the samples will be packaged in coolers using the following guidelines:

- Each sample bottle or jar will be placed within a ziplock bag which will be sealed. Additionally, samples that are suspected to be of medium or high concentration will be placed in a paint can which will be sealed.
- Bubble wrap will be placed around the samples to help prevent breakage during subsequent transport.
- The bottles and jars will be placed into coolers. Samples for organic, inorganic, and special analyses will be placed into different coolers as they typically will be going to different laboratories.
- Vermiculite will be poured into the spaces around the sample containers to fill void space and help prevent breakage during transport.
- At least two gallon bags filled with ice will be placed on the samples in each cooler to help maintain the ice chest temperature at approximately 4°C. Additional vermiculite may be added on top of the ice to fill the cooler.
- The appropriate Traffic Report/Chain-of-Custody forms (laboratory copies only) will be sealed inside a two-gallon plastic bag and taped to the inside of the cooler lid.
- The coolers will then be closed, and they will be sealed with strapping or packing tape and at least two EPA custody seals (on opposite sides of the cooler). Also, if samples need to be left unattended, the samples will be placed in a cooler, and the cooler will be sealed with custody tape and stored in a secured place.

4.3.7.4 Sample Shipping

When sampling is completed for a given day, the sampling team will ship the samples via Federal Express priority overnight service (at government rate) to the assigned laboratories for analytical testing. The names and addresses of the laboratories will be provided by EPA by the Friday prior to the week that sampling activities are scheduled. The sample manager will contact the EPA Sample Management Office (SMO) with information concerning the shipment after shipping the samples.

4.3.8 Task 13 - Sample Receipt Form Completion

Following sampling activities at the site or at offsite locations, the WESTON FTL will provide an EPA "Receipt of Samples" form to the representatives of the property sampled. The property representatives need to sign these forms, and the FTL should provide the property owners with a carbon copy of the signed form. These forms will identify the date, location and type of each sample collected. The forms will be forwarded to EPA as part of the final SI report. An example Receipt for Samples form is included in Appendix D.

4.4 DEMOBILIZATION AND OTHER ACTIVITIES

The remaining tasks will be completed by the field team after all samples are collected and shipped and after the field team leader acquires the consent of the WESTON PTL or Site Manager.

4.4.1 Task 14 - Demobilization

Following the completion of all sampling activities, the field team will decontaminate, package and transfer all non-disposable sampling equipment back to the WESTON Regional Equipment Supply (RES) warehouse in Houston, Texas. The command post and decontamination areas will also be dismantled. WESTON will, as possible, leave the site in the same condition it was prior to the investigation.

4.4.2 Task 15 - Decontamination Rinsate Water Disposal or Staging

After completing sampling activities the FTL will request the site representative, if present, for permission to dispose of the decontamination rinsate water in a known or suspected HWSA at the site. If permission is granted, the water will be disposed of onsite. If the site representative is not present during the field work and the site is inactive and abandoned, WESTON generally will dispose of the water onsite unless the site representative has previously objected to this practice. The WESTON PTL will inform the site representative of our intent to dispose of the rinsate water onsite when he is notified of the dates of the sampling visit.

If the site representative will not grant permission for onsite rinsate water disposal, the rinsate water will be transferred to a small drum. The rinsate water will be sampled using protocol similar to that used for surface water sampling. The drum of water then will be sealed with EPA custody tape, labelled, and staged in an area of the site designated by the site representative.

4.4.3 Task 16 - Background Information Acquisition

While in the field, the WESTON FTL and other designated personnel may collect background information needed to close project data gaps, as time allows. Activities may include visiting city offices to collect local agency file information and to obtain maps, locating water wells in the area or driving along the surface water pathway to visually document fisheries and wetlands. Background research tasks will be assigned to the FTL by the PTL once sampling activities are

completed. In general, only one or two of the field team members will be assigned background research tasks if time allows.

4.5 COMMUNITY RELATIONS

Persons requesting site information from the WESTON field team will be instructed to submit a Freedom of Information Act Request to: Freedom of Information Officer, U.S. EPA Region VI, 1445 Ross Avenue, Dallas, Texas 75202-2733. Reporters will be instructed to contact the EPA's Office of External Affairs at (214)-665-2200 or contact the EPA representative in the field if one is present. The WESTON FTL will notify the WESTON PTL or Site Manager immediately if reporters are present at the site. The WESTON personnel in the office, in turn, will notify the EPA WAM.

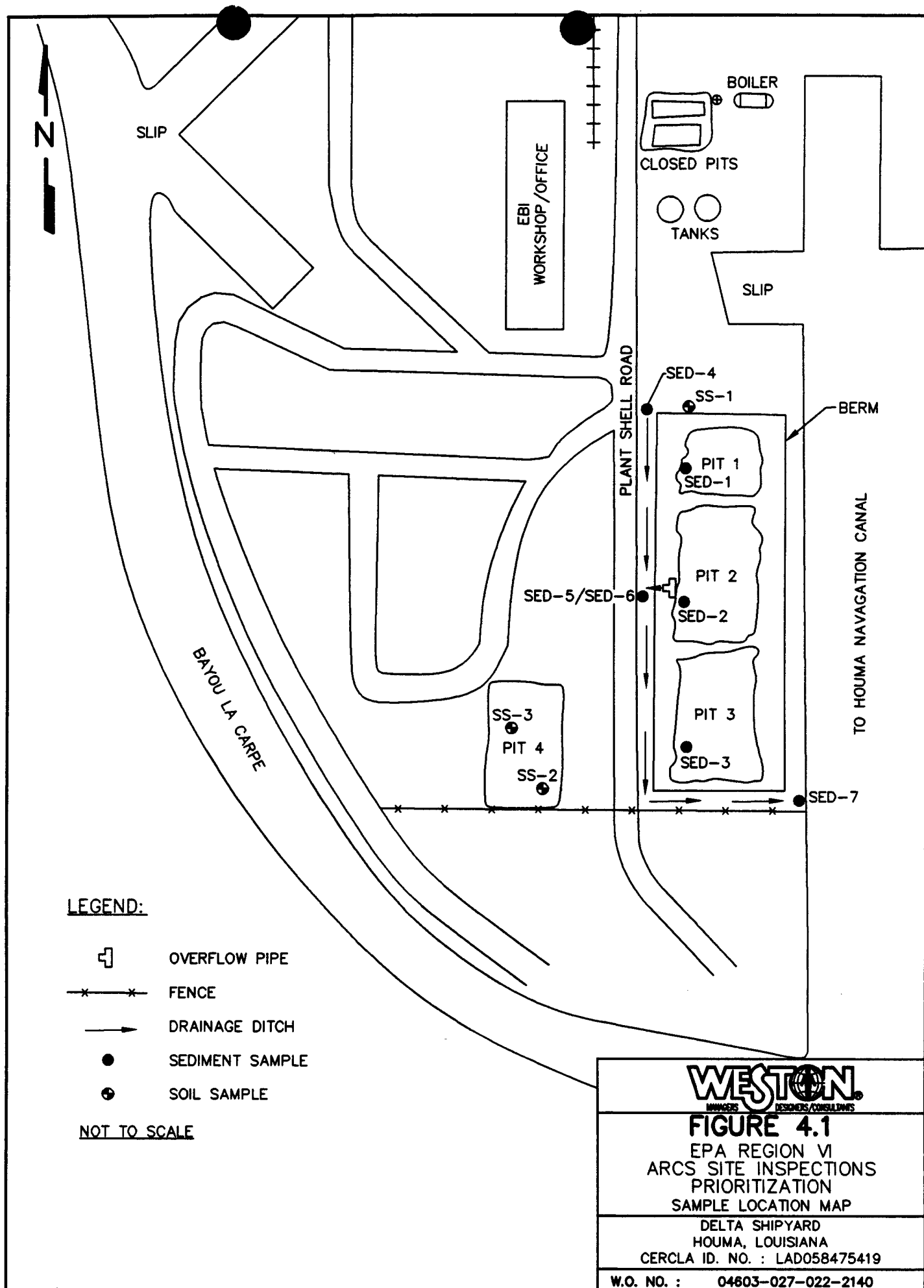
4.6 FIELD FOLLOW-UP MEMORANDUM

As stated in WESTON's Generic Site Inspection Prioritization Work Plan (Document Control No. 4603-27-0001) dated December 1991, WESTON will submit a memorandum to the WAM describing any alterations that were made to the TWP in the field. This memorandum will also serve to notify the WAM of any conditions observed at the site that appeared to represent an imminent threat.

4.7 REPORT PREPARATION

After receiving analytical data for the site from EPA, WESTON will prepare the final report for the SIP. The report will contain information as specified in WESTON's Generic Site Inspection Prioritization Work Plan and by regional guidance. The report format will include the following:

- An Introduction Section describing the background and purpose of the investigation;
- A Site Characteristics Section describing the site location, operating history, source waste characteristics and site concerns;
- A Sampling Activities Section discussing the field activities completed during the SIP;
- Individual sections for the groundwater, surface water, soil exposure and air pathways describing the environmental conditions at the site, the likelihood of a release, targets, and relevant analytical data; and
- A Summary and Conclusions Section discussing the major site concerns.



**SITE INSPECTION PHASE III PRIORITIZATION
TASK WORK PLAN**

**DELTA SHIPYARDS
HOUMA, TERREBONNE PARISH, LOUISIANA
EPA CERCLA ID NO. LAD058475419**

**TABLE 4-2
SAMPLE LOCATION, DESCRIPTION, AND RATIONALE SUMMARY**

STATION NUMBER	SAMPLE LOCATION AND DESCRIPTION	RATIONALE
SS-1	Low concentration soil sample collected from north of Pit 1.	Sample to document background conditions of the soils in the area.
SS-2	Low concentration soil sample collected from Pit 4 at the surface.	Sample for waste source characterization.
SS-3	Low concentration soil sample collected from Pit 4 below cover soil.	Sample for waste source characterization.
SED-1	Low concentration sediment sample collected from Pit 1.	Sample for waste source characterization.
SED-2	Low concentration sediment sample collected from Pit 2.	Sample for waste source characterization.
SED-3	Low concentration sediment sample collected from Pit 3.	Sample for waste source characterization.
SED-4	Low concentration sediment sample collected from the drainage pathway.	Sample to document the background conditions of the sediments in the area.
SED-5	Low concentration sediment sample collected from the drainage pathway 10 feet downstream of the overflow pipe at Pit 2.	Sample to document a release to the drainage pathway.
SED-6	Low concentration sediment sample collected from the drainage pathway 10 feet downstream of the overflow pipe at Pit 2.	Sample collected as a blind field duplicate of SED-5.

**SITE INSPECTION PHASE III PRIORITIZATION
TASK WORK PLAN**

**DELTA SHIPYARDS
HOUMA, TERREBONNE PARISH, LOUISIANA
EPA CERCLA ID NO. LAD058475419**

**TABLE 4-2
SAMPLE LOCATION, DESCRIPTION, AND RATIONALE SUMMARY
(continued)**

STATION NUMBER	SAMPLE LOCATION AND DESCRIPTION	RATIONALE
SED-7	Low concentration sediment sample collected from the drainage pathway at the confluence with Bayou La Carpe\ Houma Navigational Canal.	Sample to document a release to surface water at the PPE.

**SITE INSPECTION PHASE III PRIORITIZATION
TASK WORK PLAN**

**DELTA SHIPYARDS
HOUMA, TERREBONNE PARISH, LOUISIANA
EPA CERCLA ID NO. LAD058475419**

**TABLE 4-3
SAMPLING INFORMATION**

SAMPLING INFORMATION			
SAMPLE TYPE	NUMBER AND TYPE OF CONTAINERS REQUIRED PER SAMPLE	ANALYSES REQUIRED	SAMPLE PRESERVATION REQUIRED
Soil/ Sediment	2 - 4 oz glass jars 1 - 8 oz glass jars 1 - 8 oz glass jars	Volatiles BNAs/Pesticides/PCBs Metals/Cyanide	Cool to 4°C Cool to 4°C Cool to 4°C

SECTION 5

PROJECT INFORMATION

This section outlines basic project management information for the SIP. Details concerning key personnel and the project schedule are provided. Reference should be made to WESTON's Generic Site Inspection Prioritization Work Plan (WESTON Document Control Number 4603-27-0001) for more detailed information concerning WESTON's project management plan.

5.1 KEY PROJECT PERSONNEL

The key project personnel for this SIP assignment are shown on Figure 5.

5.2 PROJECT SCHEDULE

The overall project schedule is summarized in Table 5-2.

5.3 SAMPLING VISIT SCHEDULE

- Tuesday Travel to site.
 - 8:00 am Team arrives onsite and meets site contact. Team conducts site health and safety meeting. Samplers establish command post. FTL and Sample Manager prepare sample tags and labels.
 - 9:00 am Team collects sediment samples. Sample Manager documents samples.
 - 12:00 pm Lunch.
 - 1:00 pm Team verifies sample documentation and packages samples.
 - 4:00 pm FTL and Sample Manager depart for Federal Express to ship samples. Samplers decontaminate and load equipment, and depart the site for the day.

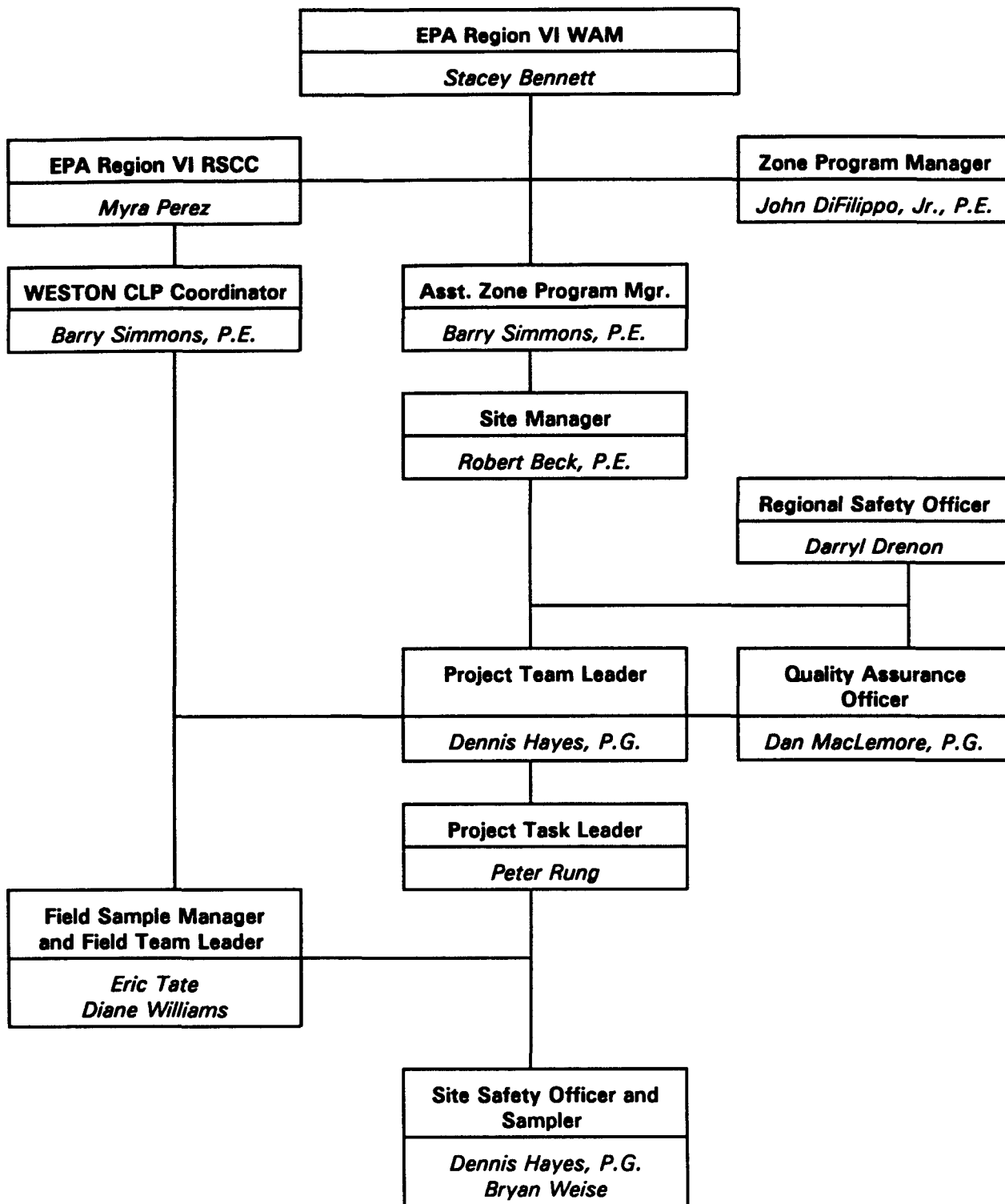
5.4 IMPORTANT PHONE NUMBERS

Important phone numbers that may be needed by the field team leader include the following:

- Local Hospital: (318) 375-3235
- WESTON 24-hr Emergency No.: 1-800-229-3674
- WESTON Office: (713) 621-1620
- WESTON RES: (713) 957-3267
- EPA WAM (Stacey Bennett): (214) 665-8374
- EPA RSCC (Myra Perez/Christy McDowell): (713) 983-2130/(713) 983-2137
- EPA (SMO): (Nina Kuhar) (703) 557-2490

- Place of Lodging in Field: (To be determined)
- Federal Express (National): 1-800-238-5355
- Federal Express (Local Office): (To be determined)

**FIGURE 5
ANTICIPATED KEY PERSONNEL**



**SITE INSPECTION PHASE III PRIORITIZATION
TASK WORK PLAN**

**DELTA SHIPYARDS
HOUMA, TERREBONNE PARISH, LOUISIANA
EPA CERCLA ID NO. LAD058475419**

TABLE 5-1

**PROJECT SCHEDULE
(1994-1995)**

TARGET MILESTONES	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR
SITE RECONNAISSANCE														
WORK PLAN PREPARATION AND SUBMITTAL														
WORK PLAN REVIEW/APPROVAL BY EPA														
LABORATORY SPACE REQUEST														
EQUIPMENT MOBILIZATION														
FIELD SAMPLING VISIT														
DATA ANALYSIS														
DATA VALIDATION														
REPORT WRITING														
REPORT QUALITY ASSURANCE														
REPORT SUBMISSION														

SECTION 6 REFERENCE LIST

1. Rung, P. 1994. Louisiana SIP Logbook, Vol. I, field notes documenting the Delta Shipyards Site Reconnaissance. Roy F. Weston, Inc., Houston, Texas 12 July 1994.
2. The Earth Technology Corporation, Inc. 12 September 1984. Site Inspection Report of Delta Shipyard. Houma, Louisiana.
3. Ecology & Environment, Inc. 11 March 1981. Site Inspection Report of Delta Shipyard. Houma, Louisiana.
4. Wink Engineering. 5 July 1985. Sampling Analyses and Report for Delta Shipyard. Houma, Louisiana.
5. EPA Region VI Geographical Environmental Modeling System (GEMS). 1990 Census Data.

APPENDIX A
SITE ACCESS AGREEMENT

APPENDIX B

HEALTH AND SAFETY PLAN

APPENDIX C
SAMPLING PROCEDURES

APPENDIX D
CLP GUIDELINES

APPENDIX E

SITE RECONNAISSANCE CHECKLIST

REFERENCE 1